

## Angles and Angle Measure

Convert each degree measure into radians and each radian measure into degrees.

1)  $325^\circ$

3)  $60^\circ$

5)  $\frac{23\pi}{12}$

7)  $570^\circ$

9)  $\frac{\pi}{2}$

2)  $340^\circ$

4)  $-\frac{4\pi}{3}$

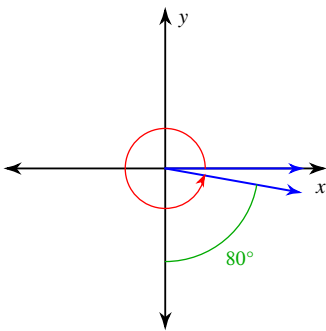
6)  $\frac{10\pi}{3}$

8)  $-315^\circ$

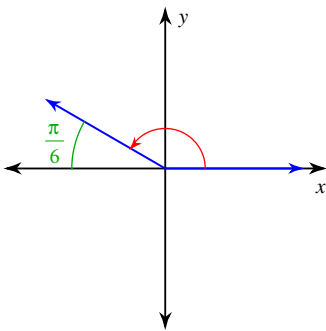
10)  $-180^\circ$

Find the measure of each angle.

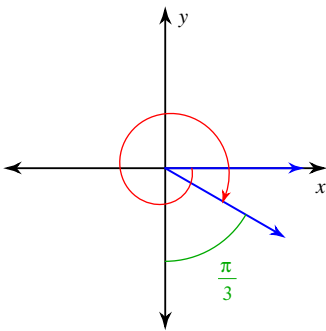
11)



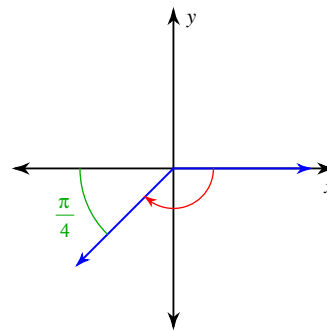
13)



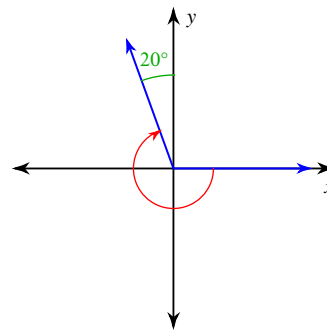
15)



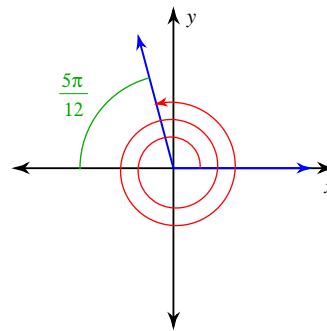
12)



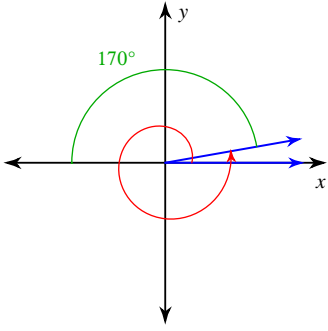
14)



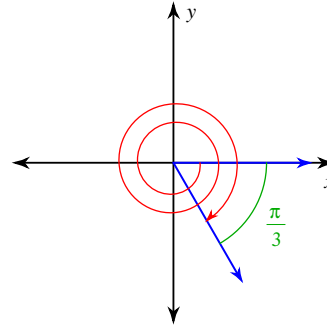
16)



17)

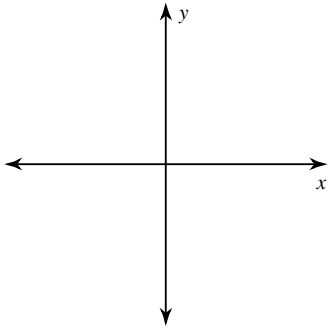


18)

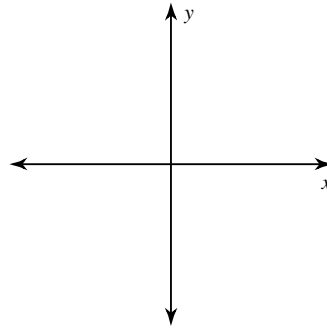


**Draw an angle with the given measure in standard position.**

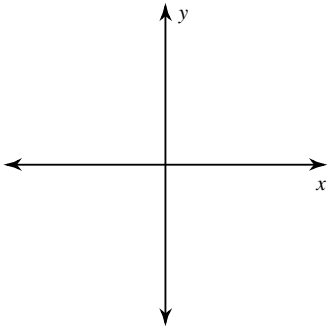
19)  $280^\circ$



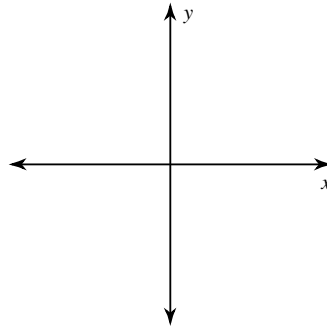
20)  $710^\circ$



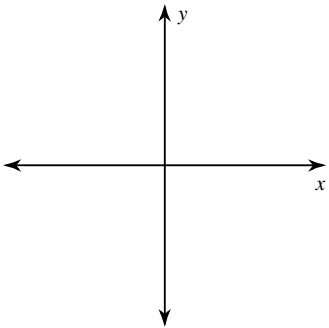
21)  $-120^\circ$



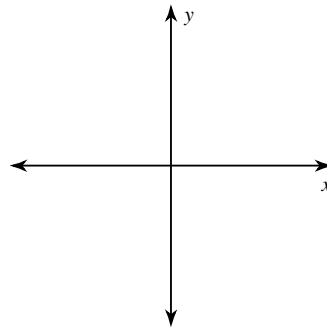
22)  $\frac{11\pi}{6}$



23)  $-\frac{10\pi}{3}$



24)  $440^\circ$



**State the quadrant in which the terminal side of each angle lies.**

25)  $-509^\circ$

26)  $-\frac{5\pi}{6}$

27)  $-340^\circ$

28)  $\frac{5\pi}{3}$

# Angles and Angle Measure

**Convert each degree measure into radians and each radian measure into degrees.**

1)  $325^\circ$   $\frac{65\pi}{36}$

3)  $60^\circ$   $\frac{\pi}{3}$

5)  $\frac{23\pi}{12}$   $345^\circ$

7)  $570^\circ$   $\frac{19\pi}{6}$

9)  $\frac{\pi}{2}$   $90^\circ$

2)  $340^\circ$   $\frac{17\pi}{9}$

4)  $-\frac{4\pi}{3}$   $-240^\circ$

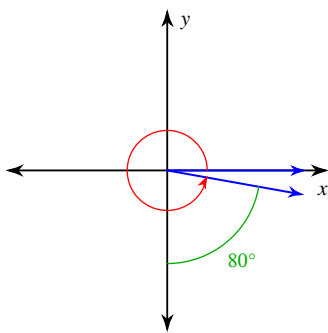
6)  $\frac{10\pi}{3}$   $600^\circ$

8)  $-315^\circ$   $-\frac{7\pi}{4}$

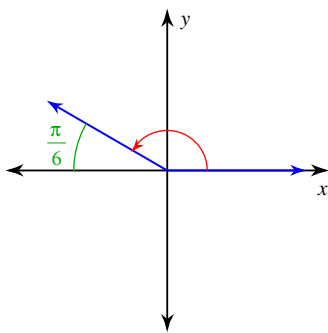
10)  $-180^\circ$   $-\pi$

**Find the measure of each angle.**

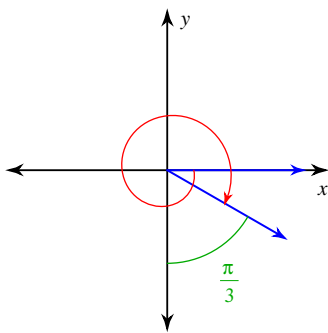
11)  $350^\circ$



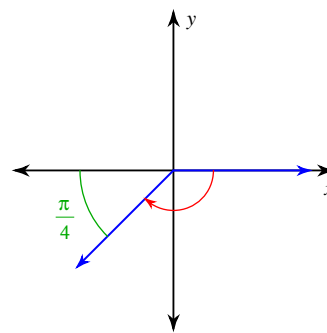
13)  $\frac{5\pi}{6}$



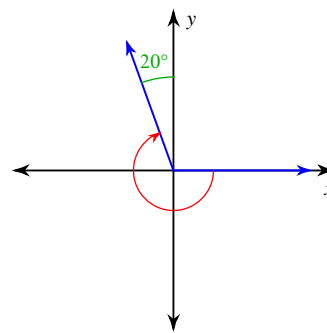
15)  $-\frac{13\pi}{6}$



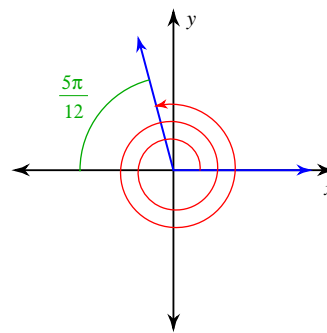
12)  $-\frac{3\pi}{4}$



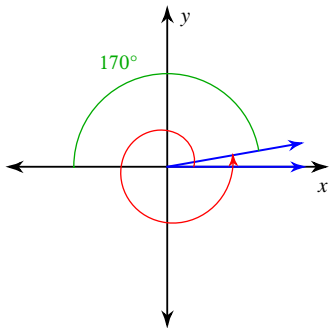
14)  $-250^\circ$



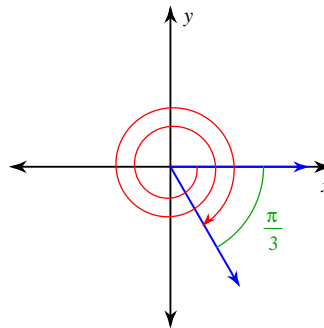
16)  $\frac{55\pi}{12}$



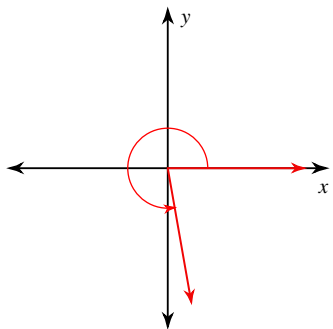
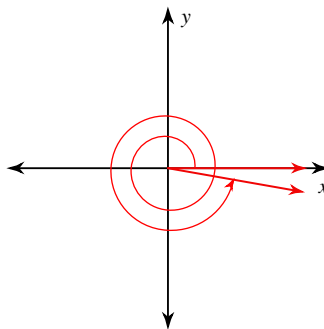
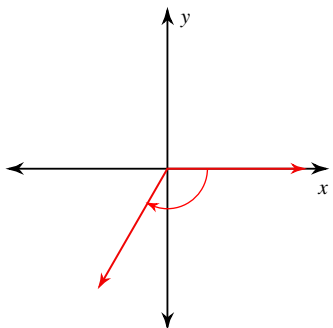
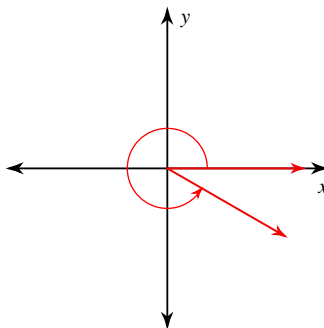
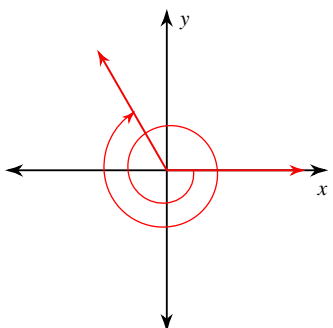
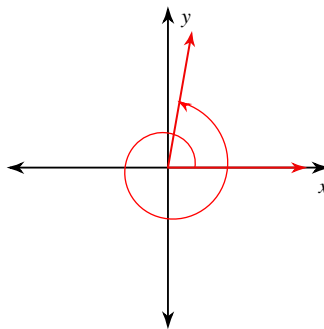
17)

 $370^\circ$ 

18)

 $-\frac{13\pi}{3}$ 

Draw an angle with the given measure in standard position.

19)  $280^\circ$ 20)  $710^\circ$ 21)  $-120^\circ$ 22)  $\frac{11\pi}{6}$ 23)  $-\frac{10\pi}{3}$ 24)  $440^\circ$ 

State the quadrant in which the terminal side of each angle lies.

25)  $-509^\circ$  III26)  $-\frac{5\pi}{6}$  III27)  $-340^\circ$  I28)  $\frac{5\pi}{3}$  IV